

What is claimed is:

1. An ice supplying device of a refrigerator comprising:
an icemaker for making ice with a cool air of a freezer;
a container mounted in a door in perpendicular to the inside of the door, the door for opening or closing the freezer, and provided below the icemaker for storing the ice when the door is closed;
a dispenser provided on an outer surface of the door; and
an ice chute provided in the door so as to connect the container and the dispenser with each other.
2. The ice supplying device as claimed in claim 1, wherein the icemaker is mounted in the door.
3. The ice supplying device as claimed in claim 1, wherein the icemaker is mounted in the freezer.
4. The ice supplying device as claimed in claim 1, wherein the container is mounted in the door by sliding along a perpendicular direction of the inside of the door, or separated from the door.
5. The ice supplying device as claimed in claim 1, wherein the icemaker includes:
an ice tray receiving water therein;
a water supplying part for supplying the water to the ice tray;

an ejector provided adjacent to the ice tray, and being rotated so as to discharge the ice of the ice tray; and

a strip being extended from the ice tray, and guiding the ice discharged by the ejector to the container.

6. The ice supplying device as claimed in claim 5, wherein the strip partially covers an upper part of the ice tray so as to prevent the water in the ice tray from overflowing when the door is opened or closed.

7. The ice supplying device as claimed in claim 5, further comprising a panel being extended from the upper part of the ice tray upward so as to prevent the water in the ice tray from overflowing when the door is opened or closed.

8. The ice supplying device as claimed in claim 1, wherein the container includes:
an outlet provided at one side thereof; and
a transporting device being rotated by a motor, and provided in the container so as to transport the ice stored in the container to the outlet.

9. The ice supplying device as claimed in claim 8, wherein the transporting device is formed of an auger crossing the inside of the container.

10. The ice supplying device as claimed in claim 9, wherein the auger is provided in perpendicular to the inside of the door.

11. The ice supplying device as claimed in claim 8, wherein the container is positioned adjacent to the outlet, and has a crusher for crushing the ice transported by the transporting device.

12. The ice supplying device as claimed in claim 11, wherein the crusher includes:
a shaft being rotated in the container; and
at least one blade being extended from the shaft, and being rotated with the shaft so as to crush the ice.

13. The ice supplying device as claimed in claim 12, wherein the shaft and the transporting device being connected to each other are rotated together.

14. The ice supplying device as claimed in claim 8, wherein the motor is mounted in the door.

15. The ice supplying device as claimed in claim 14, wherein the motor and the transporting device are connected to each other by a gear assembly, the gear assembly having a first gear connected to the motor, and a second gear connected to the transporting device and engaged with the first gear.

16. The ice supplying device as claimed in claim 8, wherein the motor and the transporting device are connected to or separated from each other when the container is mounted in the door, or separated from the door.

17. The ice supplying device as claimed in claim 8, further comprising an ice discharger provided below the container, so as to control an opening or closing amount of the outlet.

18. The ice supplying device as claimed in claim 17, wherein the ice discharger includes:
an actuator being operated according to a signal of a controller; and
a shutter for controlling the opening or closing amount of the outlet according to the operation of the actuator.